CERTIFICATE

I, Martine NION,

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do hereby declare that I am conversant with the French and English Languages, and that the attached translation signed by me is, to the best of my knowledge and belief, a true and correct translation of the Annexes to the International Preliminary Examination Report concerning International Patent Application No. PCT/FR 00/02439.

Dated : February 12, 2002

Signed : M. NION
Martine NION

CLAIMS

1. Process for the detection in vitro of a pathology in a subject, comprising taking a sample of blood cells from the subject and determining, in this sample, the presence of blood cells presenting a physiological state characteristic of the pathology.

2. Process according to claim 1, wherein it comprises the determination, in this sample, of the presence of blood cells presenting a protein or protein domain characteristic of the pathology.

3. Process according to claim 1, wherein it comprises the determination, in this sample, of the presence of blood cells presenting a genetic profile characteristic of the pathology

4. Process according to claim 3, wherein it comprises the determination, in this sample, of the presence of blood cells presenting alterations in gene expression characteristic of the presence of the pathology.

5. Process according to claim 4, wherein it comprises the determination, in this sample, of the presence of blood cells presenting transcriptional and/or post-transcriptional alterations in gene expression characteristic of the presence of the pathology.

6. Process according to one of claims 3 to 5, wherein it comprises (i) the preparation of nucleic acids from the sample and (ii) the hybridization of the nucleic acids so prepared with at least one nucleic acid bank characteristic of a pathological state, the hybridization profile indicating the presence of blood cells in the sample characteristic of the pathology.

7. Process according to claim 6, characterized in that the bank comprises nucleic acids specific for genes whose level of expression is modified in a blood cell in a pathological situation.

8. Process according to claim 6, characterized in that the bank comprises nucleic acids specific for splicing forms of genes, characteristic of a blood cell in a pathological situation.

9. Process according to one of claims 6 to 8, wherein the bank or banks are deposited on a support.

10. Process according to one of claims 6 to 9, wherein the nucleic acids prepared from the sample are total or messenger RNA, or cDNA derived therefrom.

11. Process according to claim 10, characterized in that the nucleic acids are labelled.

12. Process according to any one of the previous claims, characterized in that the blood cells are nuclear cells.

13. Process according to claim 12, characterized in that the nuclear blood cells comprise lymphocytes, macrophages, monocytes and/or dendritic cells.

14. Process according to any one of the previous claims, for the detection in vitro of the stage of progression of a pathology in a subject.

15. Process according to any one of the previous claims, for the detection in vitro of the site of a pathology in a subject.

16. Process according to any one of the previous claims, for the detection in vitro of the presence, the stage of progression and/or the site of a neurodegenerative disorder.

17. Process according to any one of claims 1 to 15, for the detection in vitro of the presence, the stage of progression and/or the site of a cancerous pathology.

18. Process of detection in vitro of blood cells characteristic of a pathological state, comprising taking a sample of blood cells from a subject and determining, in the sample, the presence of blood cells presenting a genetic profile characteristic of a pathology.

19. Process of preparation of a nucleic acid bank characteristic of a pathological state, characterized in that it comprises (i) obtaining an initial nucleic acid preparation from a blood cell isolated from an organism presenting a pathology, (ii) obtaining a nucleic acid reference preparation from a blood cell isolated from an organism not presenting this pathology, (iii) a hybridization step between said first preparation and the reference preparation, and recovery of nucleic acids characteristic of the blood cell from the organism in a pathological situation.

20. Process of preparation of a bank of nucleic acids characteristic of the stage of progression of a pathology, characterized in that it comprises (i) obtaining an initial nucleic acid preparation from a blood cell isolated from an organism presenting a pathology at a defined stage of progression, (ii) obtaining a nucleic acid reference preparation from a blood cell isolated from an organism presenting this pathology at a different stage of progression, (iii) a hybridization step between said first preparation and the reference preparation, and (iv) recovery of nucleic acids characteristic of the blood cell from the organism at a defined stage of progression of the pathology.

21. Process according to claim 19 or 20, characterized in that it comprises the recovery of clones of non-hybridized nucleic acids.

22. Process according to claim 19 or 20, characterized in that it comprises the recovery, from the hybrids formed, of nucleic acid clones specific for splicing forms of genes.

23. Process according to one of claims 19 to 22, wherein the bank is deposited on a support.

24. Nucleic acid preparation, characterized in that it comprises nucleic acids specific for genes whose level of expression is modified in a blood cell from an organism in a pathological situation.

25. Nucleic acid preparation, characterized in that it comprises nucleic acids specific for splicing forms of genes, characteristic of a blood cell from an organism in a pathological situation.

26. Kit usable for the implementation of a process according to one of claims 3 to 18 comprising a nucleic acid bank comprising nucleic acids specific for alterations in gene expression characteristic of blood cells from an organism in a pathological situation.